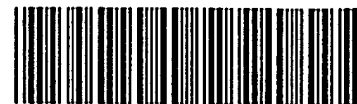


## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.**

Application Serial Number: 10/567,764  
Source: IFWP  
Date Processed by STIC: 2/27/06

# ***ENTERED***



IFWP

## RAW SEQUENCE LISTING

DATE: 02/27/2006

PATENT APPLICATION: US/10/567,764

TIME: 14:43:11

Input Set : A:\19003-002US1.txt

Output Set: N:\CRF4\02272006\J567764.raw

```

3 <110> APPLICANT: Flannery, Carl R
4     Corcoran, Christopher J
5     Freeman, Bethany A
6     Racie, Lisa A
8 <120> TITLE OF INVENTION: RECOMBINANT LUBRICIN MOLECULES AND USES THEREOF
10 <130> FILE REFERENCE: 19003-002US1
C--> 12 <140> CURRENT APPLICATION NUMBER: US/10/567,764
C--> 12 <141> CURRENT FILING DATE: 2006-02-10
12 <150> PRIOR APPLICATION NUMBER: PCT/US2004/026508
13 <151> PRIOR FILING DATE: 2004-08-13
15 <150> PRIOR APPLICATION NUMBER: US 60/495,741
16 <151> PRIOR FILING DATE: 2003-08-14
18 <160> NUMBER OF SEQ ID NOS: 29
20 <170> SOFTWARE: PatentIn version 3.3
22 <210> SEQ ID NO: 1
23 <211> LENGTH: 155
24 <212> TYPE: DNA
25 <213> ORGANISM: Artificial
27 <220> FEATURE:
28 <223> OTHER INFORMATION: Nucleotide sequence of synthetic cDNA cassette-1.
30 <400> SEQUENCE: 1
31 cgcgcccaca actccaaaag agcccgccacc taccacgaca aagtcagctc ctactacgcc      60
33 caaagagcca gcgccgacga ctactaaaga accggcaccc accacgccta aggagccagc      120
35 tcctactaca acgaaaccgg caccaaccac tccgg                                     155
38 <210> SEQ ID NO: 2
39 <211> LENGTH: 51
40 <212> TYPE: PRT
41 <213> ORGANISM: Artificial
43 <220> FEATURE:
44 <223> OTHER INFORMATION: Translation of SEQ ID NO: 1.
46 <400> SEQUENCE: 2
48 Ala Pro Thr Thr Pro Lys Glu Pro Ala Pro Thr Thr Thr Lys Ser Ala
49 1           5           10           15
51 Pro Thr Thr Pro Lys Glu Pro Ala Pro Thr Thr Thr Lys Glu Pro Ala
52           20           25           30
54 Pro Thr Thr Pro Lys Glu Pro Ala Pro Thr Thr Thr Lys Pro Ala Pro
55           35           40           45
57 Thr Thr Pro
58           50
61 <210> SEQ ID NO: 3
62 <211> LENGTH: 125
63 <212> TYPE: DNA
64 <213> ORGANISM: Artificial

```

## RAW SEQUENCE LISTING

DATE: 02/27/2006

PATENT APPLICATION: US/10/567,764

TIME: 14:43:11

Input Set : A:\19003-002US1.txt

Output Set: N:\CRF4\02272006\J567764.raw

66 &lt;220&gt; FEATURE:

67 &lt;223&gt; OTHER INFORMATION: Nucleotide sequence of synthetic cDNA cassette-2.

69 &lt;400&gt; SEQUENCE: 3

70 taaagaacca gccctacta cgacaaagga gcctgcaccc acaaccacga agagcgcacc 60

72 cacaacacca aaggagccgg cccctacgac tcctaaggaa cccaaaccgg caccaaccac 120

74 tccgg 125

77 &lt;210&gt; SEQ ID NO: 4

78 &lt;211&gt; LENGTH: 41

79 &lt;212&gt; TYPE: PRT

80 &lt;213&gt; ORGANISM: Artificial

82 &lt;220&gt; FEATURE:

83 &lt;223&gt; OTHER INFORMATION: Translation of SEQ ID NO: 3.

85 &lt;400&gt; SEQUENCE: 4

87 Lys Glu Pro Ala Pro Thr Thr Thr Lys Glu Pro Ala Pro Thr Thr Thr

88 1 5 10 15

90 Lys Ser Ala Pro Thr Thr Pro Lys Glu Pro Ala Pro Thr Thr Pro Lys

91 20 25 30

93 Glu Pro Lys Pro Ala Pro Thr Thr Pro

94 35 40

97 &lt;210&gt; SEQ ID NO: 5

98 &lt;211&gt; LENGTH: 8049

99 &lt;212&gt; TYPE: DNA

100 &lt;213&gt; ORGANISM: Artificial

102 &lt;220&gt; FEATURE:

103 &lt;223&gt; OTHER INFORMATION: pTmed2 vector containing recombinant PRG4-Lub:1 cDNA construct.

105 &lt;400&gt; SEQUENCE: 5

106 catatgcggt gtgaaatacc gcacagatgc gtaaggagaa aataccgcat caggcgtact 60

108 gagtcattag ggactttcca atgggttttg cccagtacat aaggtcaata ggggtgaatc 120

110 aacaggaaaag tcccattgga gccaaagtaca ctgagtcaat agggactttc cattgggttt 180

112 tgcccagtac aaaagggtcaa taggggggtga gtcaatgggt ttttccatt attggcacgt 240

114 acataagggtc aataggggtg agtcattggg tttttccagc caatttaatt aaaacgccat 300

116 gtactttccc accattgacg tcaatgggct attgaaacta atgcaacgtg acctttaaac 360

118 ggtactttcc catagctgat taatgggaaa gtaccgttct cgagccaata cacgtcaatg 420

120 ggaagtgaiaa gggcagccaa aacgtaacac cgccccggtt tccccctgga aattccatat 480

122 tggcacgcat tctattggct gagctgcgtt ctacgtgggt ataagaggcg cgaccagcgt 540

124 cggtagcgtc gcagtcctcg gtctgaccac cgtagaacgc agagtcctc gctgcagccc 600

126 aagctctgtt gggctcgcgg ttgaggacaa actcttcgcg gtctttccag tactcttgga 660

128 tcggaacccc gtcggcctcc gaacggtact ccgccaccga gggacctgag cgagtcgcga 720

130 tcgaccggat cggaaaacct ctgcactgtt ggggtgagta ctccctctca aaagcgggca 780

132 tgactttctgc gctaagattg tcagtttcca aaaacgagga ggatttgata ttcacctggc 840

134 ccgcggtgat gcctttgagg gtggccgcgt ccatctgggtc agaaaagaca atctttttgt 900

136 tgtcaagctt gaggtgtggc aggttgaga tctggccata cacttgagtg acaatgacat 960

138 ccactttgcc tttctctcca caggtgtcca ctcccagggt caactgcaga cttcgaattc 1020

140 tactgagtcg acccaccatg gcatggaaaa cacttcccat ttacctgttg ttgctgctgt 1080

142 ctgttttctg gattcagcaa gtttcatctc aagatttatc aagctgtgca gggagatgtg 1140

144 ggggaagggtt ttctagagat gccacctgca actgtgatta taactgtcaa cactacatgg 1200

146 agtgctgccc tgatttcaag agagtctgca ctgcggagct ttctgtgaaa ggccgctgct 1260

148 ttgagtcctt cgagagaggg agggagtgtg actgcgacgc ccaatgtaag aagtatgaca 1320

150 agtgctgtcc cgattatgag agtttctgtg cagaagtgca taatcccaca tcaccaccat 1380

## RAW SEQUENCE LISTING

DATE: 02/27/2006

PATENT APPLICATION: US/10/567,764

TIME: 14:43:11

Input Set : A:\19003-002US1.txt

Output Set: N:\CRF4\02272006\J567764.raw

152	cttcaaagaa	agcacctcca	ccttcaggag	catctcaaac	catcaaataca	acaaccaaac	1440
154	gttcacccaa	accaccaaac	aagaagaaga	ctaagaaagt	tatagaatca	gaggaaataa	1500
156	cagaagaaca	ttctgtttct	gaaaatcaag	agtcctcctc	cagtagcagt	tcaagtagtt	1560
158	cgtcgtcgac	aatttgga	atcaagtctt	ccaaaaattc	agctgcta	agagaattac	1620
160	agaagaaact	caaagtaaaa	gataacaaga	agaacagaac	taaaaagaaa	cctaccccca	1680
162	aaccaccagt	tgtagatgaa	gctggaagt	gattggacaa	tgggtgactt	aagggtcaca	1740
164	ctcctgacac	gtctaccacc	caacacaata	aagtcagcac	atctcccaag	atcacaacag	1800
166	caaaaccaat	aaatcccaga	cccagtcttc	cacctaattc	tgatacatct	aaagagacgt	1860
168	ctttgacagt	gaataaagag	acaacagttg	aaactaaaga	aactactaca	acaaataaac	1920
170	agacttcaac	tgatggaaaa	gagaagacta	cttcgcgtaa	agagacacaa	agtatagaga	1980
172	aaacatctgc	taaagattta	gcaccacat	ctaaagtgt	ggctaaacct	acacccaaag	2040
174	ctgaaactac	aaccaaaggc	cctgctctca	ccactcccaa	ggagcccacg	cccaccactc	2100
176	ccaaggagcc	tgcactctacc	acacccaaag	agcccacacc	taccaccatc	aagagcgcg	2160
178	ccacaactcc	aaaagagccc	gcacctacca	cgacaaagtc	agctcctact	acgccc aaag	2220
180	agccagcgcc	gacgactact	aaagaaccgg	caccacccac	gcctaaggag	ccagctccta	2280
182	ctacaacgaa	accggcacca	accactccgg	aaacacctcc	tccaaccact	tcagaggtct	2340
184	ctactccaac	taccaccaag	gagcctacca	ctatccacaa	aagccctgat	gaatcaactc	2400
186	ctgagctttc	tgcagaaccc	acaccaaag	ctcttgaaaa	cagtcceaag	gaacctgggt	2460
188	tacctacaac	taagacgccg	gcggcgacta	aacctgaaat	gactacaaca	gctaaagaca	2520
190	agacaacaga	aagagactta	cgtactacac	ctgaaactac	aactgctgca	cctaagatga	2580
192	caaaagagac	agcaactaca	acagaaaaaa	ctaccgaatc	caaaataaca	gctacaacca	2640
194	cacaagtaac	atctaccaca	actcaagata	ccacaccatt	caaaattact	actcttaaaa	2700
196	caactactct	tgcacccaaa	gtaactacaa	caaaaaagac	aattactacc	actgagatta	2760
198	tgaacaaacc	tgaagaaaca	gctaaaccaa	aagacagagc	tactaattct	aaagcgacaa	2820
200	ctcctaaacc	tcaaaagcca	accaaagcac	ccaaaaaacc	cacttctacc	aaaaagccaa	2880
202	aaacaatgcc	tagagtgaga	aaaccaaaga	cgacaccaac	tccccgcaag	atgacatcaa	2940
204	caatgccaga	attgaacctt	acctcaagaa	tagcagaagc	catgtctcaa	accaccacca	3000
206	gacctaacca	aactccaaac	tccaaactag	ttgaagtaaa	tccaaagagt	gaagatgcag	3060
208	gtgggtgctga	aggagaaaca	cctcatatgc	ttctcaggcc	ccatgtgttc	atgcctgaag	3120
210	ttactcccga	catggattac	ttaccgagag	tacccaatca	aggcattatc	atcaatccca	3180
212	tgttttccga	tgagaccaat	atatgcaatg	gtaagccagt	agatggactg	actactttgc	3240
214	gcaatgggac	attagttgca	ttccgaggtc	attattttctg	gatgctaagt	ccattcagtc	3300
216	caccatctcc	agctcgacga	attactgaag	tttgggggat	tccttcccc	attgatactg	3360
218	tttttactag	gtgcaactgt	gaaggaaaaa	ctttcttctt	taaggattct	cagtactggc	3420
220	gtttttacca	tgatataaaa	gatgcagggt	accccaaacc	aattttcaaa	ggatttggag	3480
222	gactaactgg	acaaatagtg	gcagcgcttt	caacagctaa	atataagaac	tggcctgaat	3540
224	ctgtgtattt	tttcaagaga	ggtggcagca	ttcagcagta	tatttataaa	caggaacctg	3600
226	tacagaagtg	ccctggaaga	aggcctgctc	taaattatcc	agtgtatgga	gaaatgacac	3660
228	aggttaggag	acgtcgcttt	gaacgtgcta	taggaccttc	tcaaacacac	accatcagaa	3720
230	ttcaatatcc	acctgccaga	ctggcttatc	aagacaaagg	tgtccttcat	aatgaagtta	3780
232	aagtgagtat	actgtggaga	ggacttccaa	atgtgggttac	ctcagctata	tactgcccc	3840
234	acatcagaaa	acctgacggc	tatgattact	atgccttttc	taaagatcaa	tactataaca	3900
236	ttgatgtgcc	tagtagaaca	gcaagagcaa	ttactactcg	ttctgggcag	accttatcca	3960
238	aagtctggta	caactgtcct	taagcggccg	ccgcaaattc	taacgttact	ggccgaagcc	4020
240	gcttggaaata	aggccggtgt	gcgtttgtct	atatgttatt	ttccaccata	ttgccgtctt	4080
242	ttggcaatgt	gagggcccg	aaacctggcc	ctgtcttctt	gacgagcatt	cctaggggtc	4140
244	tttcccctct	cgccaaagga	atgcaaggtc	tgttgaatgt	cgtgaaggaa	gcagttcctc	4200
246	tggaaagcttc	ttgaagacaa	acaacgtctg	tagegacctt	ttgcaggcag	cggaaccccc	4260
248	cacctggcga	caggtgcctc	tgcggccaaa	agccacgtgt	ataagataca	cctgcaaagg	4320

## RAW SEQUENCE LISTING

DATE: 02/27/2006

PATENT APPLICATION: US/10/567,764

TIME: 14:43:11

Input Set : A:\19003-002US1.txt

Output Set: N:\CRF4\02272006\J567764.raw

250	cggcacaacc	ccagtgccac	gttgtgagtt	ggatagttgt	ggaaagagtc	aaatggctct	4380
252	cctcaagcgt	attcaacaag	gggctgaagg	atgccagaa	ggtaccccat	tgtatgggat	4440
254	ctgatctggg	gcctcgggtc	acatgcttta	catgtgttta	gtcgaggtta	aaaaacgtct	4500
256	aggccccccg	aaccacgggg	acgtgggttt	cctttgaaaa	acacgattgc	tcgagccatc	4560
258	atggttcgac	cattgaactg	catcgtcgcc	gtgtcccaaa	atatggggat	tggcaagaac	4620
260	ggagacctac	cctggcctcc	gctcaggaac	gagttcaagt	acttccaaag	aatgaccaca	4680
262	acctcttcag	tggaaggtaa	acagaatctg	gtgattatgg	gtaggaaaac	ctggttctcc	4740
264	attcctgaga	agaatcgacc	tttaaaggac	agaattaata	tagttctcag	tagagaactc	4800
266	aaagaaccac	cacgaggagc	tcattttctt	gccaaaagtt	tggatgatgc	cttaagactt	4860
268	attgaacaac	cggaattggc	aagtaaagta	gacatggttt	ggatagtcgg	aggcagttct	4920
270	gtttaccagg	aagccatgaa	tcaaccaggc	cacctcagac	tctttgtgac	aaggatcatg	4980
272	caggaatttg	aaagtgcac	gtttttccca	gaaattgatt	tggggaaata	taaactttctc	5040
274	ccagaatacc	caggcgtcct	ctctgaggtc	caggaggaaa	aaggcatcaa	gtataagttt	5100
276	gaagtctacg	agaagaaaga	ctaacaggaa	gatgctttca	agttctctgc	teccctccta	5160
278	aagctatgca	ttttttataa	gaccatggga	cttttgctgg	ctttagatca	taatcagcca	5220
280	taccacattt	gtagaggttt	tacttgcttt	aaaaaacctc	ccacacctcc	ccctgaacct	5280
282	gaaacataaa	atgaatgcaa	ttgttggtgt	taacttgttt	attgcagctt	ataatggtta	5340
284	caaataaagc	aatagcatca	caaatttcac	aaataaagca	tttttttcac	tgcatcttag	5400
286	ttgtggtttg	tccaaactca	tcaatgtatc	ttatcatgtc	tggatccccg	gccaaccggtc	5460
288	tggtagcccg	gctcgagagc	ctcgggtgac	ctgagacgcg	agtaagccct	tgagtcaaag	5520
290	acgtagtcgt	tgcaagtcgg	caccaggtac	tgatcatcga	tgctagaccg	tgcaaaagga	5580
292	gagcctgtaa	gcgggcactc	ttcgtgggtc	tgggtgataa	attcgcaagg	gtatcatggc	5640
294	ggacgaccgg	ggttcgaacc	ccggatccgg	ccgtccgccc	tgatccatcc	ggttaccgcc	5700
296	cgcgtgtcga	acccaggtgt	gcgacgtcag	acaacggggg	agcgctcctt	ttggcttccct	5760
298	tccaggcgcg	gcggctgctg	cgctagcttt	tttggcgagc	tcgaattaat	tctgcattaa	5820
300	tgaatcgggc	aacgcgcggg	gagaggcggt	ttgcgtattg	ggcgctcttc	cgcttctctg	5880
302	ctcactgact	cgctgcgctc	ggtcgttcgg	ctgcggcgag	cggtatcagc	tcactcaaag	5940
304	gcggtaatat	ggttatccac	agaatcaggg	gataacgcag	gaaagaacat	gtgagcaaaa	6000
306	ggccagcaaa	aggccaggaa	ccgtaaaaag	gccgcgttgc	tggcgttttt	ccataggctc	6060
308	cgcccccttg	acgagcatca	caaaaaatcg	cgctcaagtc	agaggtggcg	aaaccgcaca	6120
310	ggactataaa	gataccaggc	gtttccccct	ggaagctccc	tcgtgcgctc	tcctgttccg	6180
312	accctgccgc	ttaccggata	cctgtccgcc	tttctccctt	cggaagcggt	ggcgctttct	6240
314	caatgctcac	gctgtaggtg	tctcagttcg	gtgtaggtcg	ttcgctccaa	gctgggctgt	6300
316	gtgcacgaac	ccccggttca	gcccgaccgc	tgcgccttat	ccggtaaacta	tcgtcttagc	6360
318	tccaaccggg	taagacacga	cttatcgcca	ctggcagcag	ccactggtaa	caggattagc	6420
320	agagcgaggt	atgtaggcgg	tgctacagag	ttcttgaagt	ggtggcctaa	ctacggctac	6480
322	actagaagga	cagtatttgg	tatctgcgct	ctgctgaagc	cagttacctt	cggaaaaaga	6540
324	gttggtagct	cttgatccgg	caaacaaaac	accgctggta	gcggtggttt	ttttgtttgc	6600
326	aagcagcaga	ttacgcgcag	aaaaaaaagg	tctcaagaag	atcctttgat	cttttctacg	6660
328	gggtctgacg	ctcagtggaa	cgaaaactca	cgttaaagga	ttttgggtcat	gagattatca	6720
330	aaaaggatct	tcacctagat	ccttttaaat	taaaaatgaa	gttttaaatc	aatctaaagt	6780
332	atatatgagt	aaacttggtc	tgacagttac	caatgcttaa	tcagtgaggc	acctatctca	6840
334	gcgatctgtc	tatttcgttc	atccatagtt	gcctgactcc	ccgtcgtgta	gataactacg	6900
336	atacgggagg	gcttaccatc	tggccccagt	gctgcaatga	taccgcgaga	cccacgctca	6960
338	ccggctccag	atztatcagc	aataaaccag	ccagccggaa	gggcccagcg	cagaagtggg	7020
340	cctgcaactt	tatccgcctc	catccagttc	attaattggt	gccgggaagc	tagagtaagt	7080
342	agttcgccag	ttaatagttt	gcgcaacggt	gttgccattg	ctacaggcat	cgtgggtgtca	7140
344	cgctcgtcgt	ttgggtatgg	ttcattcagc	tccggttccc	aacgatcaag	gcgagttaca	7200
346	tgatccccc	tgttgtgcaa	aaaagcgggt	agctccttcg	gtcctccgat	cgttgtcaga	7260

## RAW SEQUENCE LISTING

DATE: 02/27/2006

PATENT APPLICATION: US/10/567,764

TIME: 14:43:11

Input Set : A:\19003-002US1.txt

Output Set: N:\CRF4\02272006\J567764.raw

```

348 agtaagttgg ccgcagtgtt atcactcatg gttatggcag cactgcataa ttctcttact 7320
350 gtcattgccat ccgtaagatg cttttctgtg actggtgagt actcaaccaa gtcattctga 7380
352 gaatagtgtg tgccggcgacc gagttgctct tgcccggcgt caatacggga taataccgcg 7440
354 ccacatagca gaactttaaa agtgctcatc attggaaaac gttcttcggg gcgaaaactc 7500
356 tcaaggatct taccgctgtt gagatccagt tcgatgtaac ccactcgtgc acccaactga 7560
358 tcttcagcat cttttacttt caccagcgtt tctgggtgag caaaaacagg aaggcaaaat 7620
360 gccgcaaaaa aggggaataag ggcgacacgg aaatgttgaa tactcatact cttccttttt 7680
362 caatattatt gaagcattta tcagggttat tgtctcatga gcggatacat atttgaatgt 7740
364 atttagaaaa ataaacaaat aggggttccg cgcacatttc cccgaaaagt gccacctgac 7800
366 gtctaagaaa ccattattat catgacatta acctataaaa ataggcgtat cacgaggccc 7860
368 tttcgtctcg cgcgtttcgg tgatgacggg gaaaacctct gacacatgca gctcccggag 7920
370 acggtcacag cttgtctgta agcggatgcc gggagcagac aagcccgtca gggcgcgtca 7980
372 gcgggtgttg gcgggtgtcg gggctggctt aactatgcgg catcagagca gattgtactg 8040
374 agagtgcac 8049
377 <210> SEQ ID NO: 6
378 <211> LENGTH: 2946
379 <212> TYPE: DNA
380 <213> ORGANISM: Artificial
382 <220> FEATURE:
383 <223> OTHER INFORMATION: Recombinant PRG4-Lub:1 cDNA construct.
385 <400> SEQUENCE: 6
386 atggcatgga aaacacttcc catttacctg ttgttgetgc tgtctgtttt cgtgattcag 60
388 caagtttcat ctcaagattt atcaagctgt gcaggagat gtggggaagg gtattctaga 120
390 gatgccacct gcaactgtga ttataactgt caacactaca tggagtgtctg ccctgatttc 180
392 aagagagtct gcaactgcga gctttcctgt aaaggccgct gctttgagtc cttcgagaga 240
394 gggagggagt gtgactgcga cgcccaatgt aagaagtatg acaagtgtctg tcccgattat 300
396 gagagtttct gtgcagaagt gcataatccc acatcaccac catcttcaaa gaaagcacct 360
398 ccaccttcag gagcatctca aacctcaaa tcaacaacca aacgttcacc caaaccacca 420
400 aacaagaaga agactaagaa agttatagaa tcagaggaaa taacagaaga acattctgtt 480
402 tctgaaaatc aagagtcctc ctccagtagc agttcaagta gttcgtcgtc gacaatttgg 540
404 aaaatcaagt cttccaaaaa ttcagctgct aatagagaat tacagaagaa actcaaagta 600
406 aaagataaca agaagaacag aactaaaaag aaacctaccc ccaaaccacc agttgtagat 660
408 gaagctggaa gtggattgga caatggtgac ttcaaggta caactcctga cagctctacc 720
410 acccaacaca ataaagttag cacatctccc aagatcacia cagcaaaacc aataaatccc 780
412 agaccagtc ttcacctaa ttctgataca tctaagaga cgtctttgac agtgaataaa 840
414 gagacaacag ttgaaactaa agaaactact acaacaata aacagacttc aactgatgga 900
416 aaagagaaga ctacttccgc taaagagaca caaagtatag agaaaacatc tgctaaagat 960
418 ttagcaccca catctaaagt gctggctaaa cctacaccca aagctgaaac tacaaccaa 1020
420 ggccctgtc tcaccactcc caaggagccc acgcccacca ctccaagga gctgcatct 1080
422 accacaccca aagagcccac acctaccacc atcaagagcg cgccacaac tccaaaagag 1140
424 ccgcaccta ccacgacaaa gtcagctcct actacgccc aagagccagc gccgacgact 1200
426 actaaagaac cggcaccac cagcctaag gagccagctc ctactacaac gaaaccggca 1260
428 ccaaccactc cggaacacc tcctccaacc acttcagagg tctctactcc aactaccacc 1320
430 aaggagccta cactatcca caaaagccct gatgaatcaa ctctgagct ttctgcagaa 1380
432 cccacaccaa aagctcttga aaacagtccc aaggaacctg gtgtacctac aactaagacg 1440
434 ccggcggcga ctaaacctga aatgactaca acagctaaag acaagacaac agaaagagac 1500
436 ttacgtacta cacctgaaac tacaactgct gcacctaaag tgacaaaaga gacagcaact 1560
438 acaacagaaa aaactaccga atccaaaata acagctacaa ccacacaagt aacatctacc 1620
440 acaactcaag ataccacacc attcaaaatt actactctta aaacaactac tcttgacccc 1680

```

RAW SEQUENCE LISTING ERROR SUMMARY      DATE: 02/27/2006  
PATENT APPLICATION:    US/10/567,764      TIME: 14:43:12

Input Set : A:\19003-002US1.txt  
Output Set: N:\CRF4\02272006\J567764.raw

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,  
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27

Seq#:28,29

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/567,764

DATE: 02/27/2006

TIME: 14:43:12

Input Set : A:\19003-002US1.txt

Output Set: N:\CRF4\02272006\J567764.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application No

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date